INTRODUCTION:

In accordance with the foregoing, claims 1-3, 6-12, 14-20, and 22-28 are pending and under consideration.

REJECTION UNDER 35 U.S.C. § 102:

In the Office Action, at page 2, claims 1-3, 6-12, 14-20, and 22-28 were rejected under 35 U.S.C. § 102 in view of U.S. Patent No. 6,298,024 to Nomura ("Nomura"). This rejection is traversed and reconsideration is requested.

The Office Action refers to FIGS. 5(b) and 12(b) and column 5, lines 35-40, of Nomura as teaching the claimed recitations of independent claims 1 and 12. Column 5, lines 35-40, of Nomura describes, "a readout signal processing section 8 performs automatic gain control (AGC) to adjust the amplitude of the readout signal RF to a predetermined value, reproduces the recorded information by demodulating the readout signal RF, etc. before or after performing AGC." However, performing AGC to adjust the amplitude of an RF signal is done to amplify the RF signal by varying an amplitude ratio according to the magnitude of amplitude, and, then, making the gain constant, which is not done through sampling.

The vertical lines in FIGS. 5(b) and 12(b) are not indications of sampling and the respective description thereof provided in Nomura is devoid of any description of sampling the RF signal.

According to the Office Action, column 15, lines 10-40, of Nomura describes detecting the "amplitude of the envelope signal and sampling the envelope signal between a maximum value and a minimum value into n sample signals at a zero cross interval, and obtaining an average value of the obtained n peak-to-peak values as the detected amplitude," as recited in independent claims 1 and 12. However, in column 15, lines 1-10, Nomura explains that it generally provides obtaining the difference between the upper and lower envelopes or the mean value of the readout signal RF. Subsequently, the following equations are shown illustrating obtaining the difference between the upper and lower envelopes and an average thereof on the information track 3:

$$RFAMP(dif)_1 = RFp1 - RFb_1 \qquad (8), \text{ and}$$

RFAMP $(avg)_1$ = $(RFp_1, +RFb_1)/2$ (9)

and between the information tracks 3,

RFAMP $(dif)_2$ = $RFP_2 - RFb_2$ (10), and

RFAMP $(avg)_2$ = $(RFp_2+RFb_2)/2$ (11).

The p-p value of the amplitude of the amplitude indicating signal is given by equations (12) and (13) below. The p-p value of the amplitude (change) of the amplitude indicating signal is given by:

$$RFAMP(dif)_{p-p} = RFAMP(dif)_1 - RFAMP(dif)_2 \qquad (12)$$

$$= (RFp_1 - RFb_1) - (RFp_2 - RFb_2), \text{ or}$$

$$RFAMP(avg)_{p-p} = RFAMP(avg)_1 - RFAMP(avg)_2 \qquad (13)$$

$$= (RFp_1 + RFb_1 - RFp_2 - RFb_2)/2.$$

However, none of the equations (8)-(13), for instance, teach or suggest **sampling** the envelope signal. Emphasis added. Rather, it appears that the peak values on the information track 3 and between the information tracks 3 in <u>Nomura</u> is obtained only at one point in time. By definition, the term "sampling" as recited in independent claims 1 and 12 is defined as "samples taken at periodic intervals to measure and record some parameter." <u>See</u> Microsoft Computer Dictionary, Fourth Edition, page 393, a copy of which is enclosed with the present Amendment. Thus, by definition as known by persons skilled in the pertinent art, the "predetermined number of sample signals," recited in independent claims 1 and 12, is obtained by obtaining samples at periodic intervals of "the envelope signal between a maximum value and a minimum value." Thus, Applicants respectfully assert that <u>Nomura</u> fails to anticipate all the claimed features of independent claims 1 and 12. It is respectfully requested that independent claims 1 and 12 and related dependent claims be allowed.

Column 10, lines 59-62 of <u>Nomura</u> merely describes, "Namely, it is possible to start the identification of the type of the optical disc 1 even if the spindle motor 9 and the optical disc 1 do not reach a predetermined rotation speed and **tracking servo control** is not performed." However, the mere mention of the term "tracking servo control" does not teach or suggest, as recited in independent claim 20, "**only** when **a focusing operation** of the disc being performed **prior to a tracking control operation** of the disc being performed," emphasis added, the

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controller detects the amplitude of the envelope signal.

In addition, Nomura identifies the type of the optical disc 1 on the basis of an amplitude indicating signal RFAMP, and outputs an identification result signal DTYPE. See column 5, lines 49-56. The subtracter 32 calculates the difference Vamp between the maximum V-peak and minimum V-bottom of the amplitude indicating signal RFAMP by subtracting an output of the lower envelope detector 31 from an output of the upper envelope detector 30. See column 6, lines 57-62. Accordingly, the amplitude indicating signal RFAMP is obtained at all times rather than "only when a focusing operation of the disc being performed prior to a tracking control operation of the disc being performed," as recited in independent claim 20. Accordingly, it is respectfully asserted that Nomura fails to teach or suggest all the claimed features of independent claim 20. It is requested that independent claim 20 and related dependent claims be allowed.

Independent claim 25 recited "detecting an amplitude of the envelope signal only when a focusing operation of the disc is being performed prior to a tracking control operation of the disc being performed, to discriminate the type of the loaded disc, and controlling the reproduction of the disc in accordance with the discriminated disc type." The arguments presented above supporting the patentability of independent claim 12 are incorporated herein to support the patentability of independent claim 25 and related dependent claims. Accordingly, it is respectfully asserted that Nomura fails to teach or suggest all the claimed features of independent claim 25. It is requested that independent claim 25 and related dependent claims be allowed.

CONCLUSION:

In accordance with the foregoing, it is respectfully submitted that all outstanding objections and rejections have been overcome and/or rendered moot and further, that all pending claims patentably distinguish over the prior art. There being no further outstanding objections or rejections, the application is submitted as being in condition for allowance, which action is earnestly solicited. At a minimum, this Amendment should be entered at least for purposes of Appeal, since it either clarifies and/or narrows the issues for consideration by the Board.

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If the Examiner has any remaining issues to be addressed, it is believed that prosecution can be expedited and possibly concluded by the Examiner's contacting the undersigned attorney for a telephone interview to discuss any such remaining issues.

If there are any underpayments or overpayments of fees associated with the filing of this Amendment, please charge and/or credit the same to our Deposit Account No. 19-3935.

Respectfully submitted,

STAAS & HALSEY LLP

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By: Alicia M. Choi
Registration No. 46,621

1201 New York Avenue, NW, Suite 700
Washington, D.C. 20005
Telephone: (202) 434-1500
Facsimile: (202) 434-1501

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